The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

May 3, 2007

Senator Martha Fuller Clark, Chair
Senate Environment, Energy & Economic Development Committee
Legislative Office Building, Room 102
Concord, New Hampshire 03301

Subject: **HB 907 relative to the sale, distribution and disposal of certain mercury-added products, as amended by the House**

Dear Chairman Fuller Clark and Members of the Committee:

Thank you for the opportunity to provide testimony in support of HB 907 relative to the sale, distribution and disposal of certain mercury-added products, as amended.

The Department of Environmental Services is committed to working toward the virtual elimination of man-made mercury releases as called for in New Hampshire's 1998 *Mercury Reduction Strategy* and by the New England Governors and Eastern Canadian Premiers in the *Regional Mercury Action Plan (RMAP)*. The attached background document provides additional information on the detrimental effects of mercury pollution, as well as state and regional mercury reduction efforts.

This bill would prohibit the sale or distribution of certain types of mercury-added devices including barometers, lab thermometers, flow meters and blood pressure cuffs by January 1, 2008 and other devices such as switches, relays and thermostats, effective July 1, 2008. Many, if not all, of these products have functionally equivalent, non-mercury alternatives already available, and for those that don't, there is an exemption process built into the bill. Mercury-added products that are required by Federal law or Federal contract specification would not be phased-out. Other mercury-added products not affected by the sales prohibition include pharmaceuticals, light bulbs and batteries.

The phase-out of these products is supported by information obtained through the mercury-added products notification requirements (enacted in 2000), and by research conducted for the State of Maine by the UMASS Lowell Center for Sustainable Production (LCSP), which demonstrated that the vast majority of mercury-added devices have suitable substitutes already on the market. To date, Connecticut, Rhode Island, Maine, Vermont, Massachusetts, New York and several states outside of the Northeast Region have enacted bans on the sale of mercury-added products.

Although we have exceeded the *NH Mercury Reduction Strategy's* initial goal of a 50% reduction in mercury emissions, much more remains to be done. Strict emissions limits have reduced mercury emissions from waste combustion sources, but it is imperative that we continue

working to address the root cause of those emissions: the mercury content of solid wastes that are burned. Sources of mercury in solid waste include many common products such as thermometers, thermostats, switches, relays and measuring devices. When these items are burned, broken or improperly disposed of, mercury is released to the environment.

Mercury is a highly persistent and toxic pollutant that accumulates in the food chain. Like 45 other states, New Hampshire has issued a freshwater fish consumption advisory due to elevated levels of mercury in fish and the resulting threat to public health.

New Hampshire has long recognized and responded to the dangers of mercury and other heavy metals. HB 907 is consistent with previous actions the state has taken to reduce mercury pollution: passing legislation to reduce the mercury content of batteries; adopting *Toxics in Packaging* legislation, which limits the use of mercury, lead, cadmium and chromium in packaging; banning the use of mercury-containing pesticides; adopting a mercury-containing lamp policy; adoption of rules facilitating the recycling of mercury containing wastes; and entering into a contract to recycle all mercury-containing lamps generated by state agencies. In addition, HB 907 builds on the efforts initiated by HB 1418, passed in the 2000 legislative session. Among other things, HB 1418 prohibited the sale of certain mercury-added products (fever thermometers, novelty items) and restricted the use of elemental mercury. Passage of HB 907 would mean significant progress toward meeting the State's mercury reduction goals.

The Department is pleased to work with the Committee to further our mercury reduction efforts in New Hampshire and we hope you will support passage of HB 907. Stephanie D'Agostino of the Commissioner's Office has been assigned to work on this legislative effort; she may be contacted at 271-6398 or sdagostino@des.state.nh.us.

Sincerely,

Thomas S. Burack,
Commissioner

Attachment
CC: Members of the Senate Environment, Energy & Economic Development Committee
Representative James G. Phinizy
Representative Derek Owen
Representative Suzanne S. Butcher
Senator Harold W. Janeway

Primer on Mercury Reduction Legislation

Prepared by the NH Department of Environmental Services – March 2007

Effect of Mercury Contamination on Humans and Wildlife

Mercury contamination poses a significant threat to humans and wildlife.[1] The ingestion of fish with elevated levels of mercury is the primary pathway of exposure for the general public and wildlife. NH has fish consumption advisories for elevated mercury levels for all fresh waters in the state. Exposure can also occur by inhalation of or bodily contact with elemental mercury from a broken product (e.g., mercury fever thermometer) or from a manufacturing process.

Approximately 95 percent of the mercury found in fish is in the form of methyl mercury, a particularly toxic form. Methyl mercury is a neurotoxin and is especially harmful to the developing nervous system of fetuses and young children.

Other potential human health effects from exposures to mercury include skeletal muscle degeneration, fluid in the lungs, inflammation of the kidney, and abnormal heart rhythms among others. Effects on wildlife include physiological, behavioral and reproductive impacts.

State and Regional Mercury Reduction Efforts

In 1998, the Department of Environmental Services completed the New Hampshire Mercury Reduction Strategy. The Strategy identified 40 specific actions to reduce anthropogenic releases of mercury in New Hampshire, including actions to reduce the amount of mercury entering the waste stream in products. The actions focusing on mercury-added products are intended to accomplish several goals:

- Increase public awareness of mercury-added products and their alternatives and how to properly manage and dispose of mercury-added products;
- Eliminate or reduce non-essential uses of mercury in household, institutional and industrial products and processes; and
- Reduce the overall amount of mercury-containing waste from household, commercial, and industrial sources, through source reduction, segregation, and safe waste management, including recycling.

Mercury-added products, such as fever thermometers and other measuring devices, are often inadvertently broken in homes, schools, businesses, laboratories, and medical facilities. This can lead to dangerous levels of mercury in the air inside these facilities as well as environmental pollution. Toxic mercury releases from broken products can also lead to water pollution if they are disposed of down the drain and can contaminate other materials in municipal trash, making

[1] 1998 EPA *Mercury Report to Congress* and a regional report, *Northeast States/Eastern Canadian Provinces Mercury Study: A Framework for Action.*

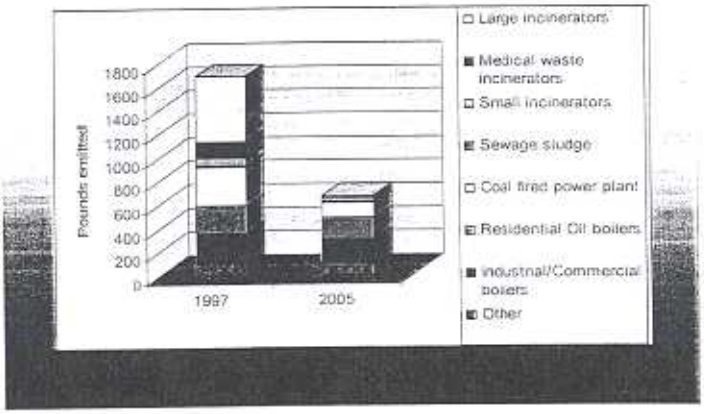
them difficult or even potentially unsafe to recycle. The best way to assure that mercury is not released is to eliminate its use where feasible and establish recovery programs where not.

In June 1998, the Conference of New England Governors and Eastern Canadian Premiers (NEG/ECP) adopted the landmark *Mercury Action Plan (MAP)*, which specifies actions to protect their citizens and environment from the toxin mercury. The NEG/ECP Mercury Action Plan was organized into six broad action categories, including a Mercury Task Force, source emission reduction, pollution prevention and waste management, research and monitoring, education and outreach, and mercury stockpile management. The MAP endorsed the development of mercury reduction programs.

The NEG/ECP Mercury Action Plan established a long-term goal of the virtual elimination of anthropogenic mercury discharges to the environment, with the interim goal of a 50% reduction from 1998 levels by 2003. New Hampshire's Mercury Reduction Strategy and specific emission reduction goals are consistent with the 1998 NEG/ECP Mercury Action Plan.

New Hampshire's mercury emissions have been reduced by 60 percent from 1997 levels by the yet, more remains to be done. In 2001, the NEG/ECP adopted a second interim goal: to reduce mercury emissions by 75% by 2010.

NH MERCURY EMISSIONS
1997 & 2005



MERCURY PRODUCTS LEGISLATIVE INITIATIVE

In 2000, the New England Governors' Conference (NEGC) endorsed the introduction, on a state-by-state basis, of the Mercury Education and Reduction Model Act (Model legislation), which was developed by a regional task force under the NEG/ECP with the help of the Northeast Waste Management Officials' Association (NEWMOA). The Model legislation reflects current efforts in the U.S. and Canada to reduce mercury in waste streams.

Many of the elements in the model legislation have been adopted by the New England states (see table in Attachment A) as well as states outside of the northeast region. In 2000, NH passed several provisions from the model legislation (RSA 149-M:51-56):

- **Limited Product Ban:** Banned the sale of certain mercury-added products (i.e., thermometers and novelties) and prohibited the use of mercury and most mercury-added products in schools;

- **Elemental Mercury:** Limited the use of elemental mercury to a few specific purposes and required certifications;

- **Notification:** Required manufacturers of mercury products to notify the state of the purpose of mercury and mercury content of their products and total annual use of mercury;

- **Public Education and Outreach:** Directed NHDES to implement a public education and outreach program; and

- **Interstate Clearinghouse:** Authorized participation in the regional, interstate clearinghouse. The New England states established the Interstate Mercury Education and Reduction Clearinghouse (IMERC), which is operated through NEWMOA, to ensure consistent application of the requirements enacted by various states.

In 2001, New Hampshire introduced HB 675, which contained the additional provisions from the model legislation not adopted in 2000. HB 675 was sent to Interim Study, substantially modified and re-introduced in the 2002 session. At the of the 2002 session, it was again sent to Interim Study, with the study committee voting unanimously to recommend it for introduction again in 2003. Since 2003, additional mercury-added products legislation has been introduced and twice passed the House then failed in the Senate, most recently in 2005.

2007 Mercury-Added Products Legislative Proposal

HB 907 proposes to prohibit the sale or distribution of certain categories of mercury-added products, all of which have readily available non-mercury alternatives, beginning July 1, 2008. The sales prohibition on these products is supported by information obtained through the mercury-added product notification requirements enacted in 2000, which indicate that such products account for the majority of the mercury used in product manufacturing, and by research conducted for the State of Maine by the Lowell Center for Sustainable Production, which found that functionally equivalent non-mercury alternatives are available at comparable cost for most mercury-added measuring devices, switches and relays. Maine passed similar legislation in 2003 (Public Laws 2003, Chapter 221) and Rhode Island (2001) and Connecticut (2002) had previously enacted laws phasing out the sale of mercury-added products. In 2006 Vermont, Massachusetts and New York passed legislation restricting the sale of mercury-added products. In addition, several states outside of the Northeast Region have prohibited or restricted the sale of mercury-added products, including California, Illinois, Washington and most recently Louisiana.

Mercury-added products that are required by Federal or State law or Federal contract specification would not be phased-out. Other mercury-added products not affected by the sales prohibition include pharmaceuticals, light bulbs and batteries.

In addition, all manufacturers / users of mercury-added products would have the opportunity to request a conditional (and renewable) exemption from the phase-out requirements, which would be in effect for a minimum of two years. An exemption would be granted if:

(a) Reasonable efforts have been made to remove mercury from the product; and

(b) One of the following applies:

(1) Use of the product provides a net benefit to the environment, public health or public safety when compared to available non-mercury alternatives; or

(2) Technically feasible non-mercury alternatives are not available at comparable cost.

Although stricter emissions limits have reduced mercury emissions from waste combustion sources, it is imperative that we continue working to address the root cause of those emissions: the mercury content of solid wastes that are burned. HB 907 will reduce incidental exposure to mercury, reduce mercury in the solid waste stream, and facilitate the recycling of mercury-containing products, so that they are not incinerated or landfilled.

TABLE 1 Status of Mercury Education & Reduction Legislation in the New England States
October 2006

Requirement	CT	MA	ME	NH	RI	VT
Mercury-added Product Notification	✪	✪	✪		✪	✪
Participation in Interstate Clearinghouse (IMERC)	✪	✪	✪		✪	✪
Bans on Sale of Certain Mercury -Added Products	✪	✪	✪		✪	✪
Bans on Sale of Certain Mercury-added Novelty Items	✪				✪	✪
Bans on Sale of Mercury Fever Thermometers	✪	✪	✪		✪	✪
Bans on Use of Mercury & Certain Mercury-added Products in K -12 Schools		✪	✪		✪	✪
Phase-Outs on Sale of Certain Mercury-added Products with Exemptions	✪	✪	✪		✪	✪
Product Labeling	✪	✪	✪		✪	✪
Bans on Disposal of Most Mercury-added Products		✪	✪		✪	✪
Plans for Collecting Mercury-added Products	✪	✪			✪	
Disclosure of Incidental Mercury Content in Certain Products for Hospitals			✪		✪	
Control on Sale of Elemental Mercury	✪		✪		✪	✪
Public Education and Outreach	✪	✪	✪		✪	✪
Universal Waste Rule	*	*	*		✪	✪

Requirement	CT	MA	ME	NH	RI	VT
State Procurement		✪	*		✪	*
Education on Dental Amalgam	✪	*	✪			
Dental Amalgam Separators or Recycling Required	✪	*	✪		*[1]	✪
Mercury Auto Switch Phase-out & Removal	*	✪	✪	V	✪	✪

✪= Provisions that have been passed.
*= Authority exists to implement under existing laws or policies.
V = Voluntary program in place.

[1] Rhode Island dentists served by the Narragansett Bay Commission are required to install amalgam separators; RI DEM has developed a voluntary program for dentists state-wide based on the Narragansett Bay Commission regulations.

Where to Find More Information

For more information on state specific mercury-added laws and regulations, visit the following websites:

- California http://www.dtsc.ca.gov/HazardousWaste/Mercury/
- Connecticut http://www.dep.state.ct.us/wst/mercury/mercury.htm
- Illinois http://www.epa.state.il.us/mercury/mercury-illinois.html
- Maine http://www.maine.gov/dep/mercury
- Massachusetts http://www.mass.gov/dep/toxics/priorities/priorities.htm#hgresults
- Minnesota http://www.pca.state.mn.us/air/mercury.html
- New Hampshire http://www.des.state.nh.us/nhppp/Mercury/index.asp?link=leg
- New York http://www.dec.state.ny.us/website/dshm/redrecy/mercury.htm
- New Jersey http://www.nj.gov/dep/dsr/mercury_task_force.htm
- North Carolina http://www.enr.state.nc.us/html/technicalassist.html
- Rhode Island http://www.dem.ri.gov/topics/mercury.htm
- Vermont http://www.mercvt.org/merc.htm
- Washington http://www.ecy.wa.gov/programs/eap/pbt/mercuryplan.html